Amendments to the Specification:

Please replace the first paragraph on page 1 with the following replacement paragraph:

This application claims the benefit of priority based on U.S. Provisional Application No. 60/178,726, filed on January 28, 2000, and is related by subject matter to concurrently filed U.S. Patent Application Serial No. ~~XX/YYYYYY~~ 09/769,780 entitled "Control of Optical Connections in an Optical Network" by the same inventors.

Please replace the paragraph beginning on page 5, line 15 and ending on page 6, line 2, with the following replacement paragraph:

Every node in the network consists of an IP router and an OLXC. In general, the router may be traffic bearing, or it may function purely as a controller for the optical layer and carry no IP data traffic. The node may be implemented using a standalone router interfacing with the OLXC through a defined interface, or may be an integrated system, in which case the router is part of the OLXC system. The policies and mechanisms described herein for optical bandwidth management and restoration are applicable whether the router carries data or not. U.S. Patent Application, Serial Number ~~XX/YYYYYY~~ 09/685,952 entitled "A Recovery Method for a Network" filed October 12, 2000, and U.S. Patent Application, Serial Number 09/685,953, entitled "Method and Apparatus for Routing Information Over Optical Pathways" filed October 12, 2000, are also incorporated herein by reference.

Please replace the first full paragraph on page 10 with the following replacement paragraph:

A fiber span consists of a collection of fiber cables that are located in the same conduit or right of way. If there is a cut in the fiber span, then failures would potentially be experienced on all fibers within the fiber span. For restoration and diverse routing purposes it may be necessary to associate links within a fiber span in a Shared Risk Link Group (SRLG). A SRLG is a union of all links that ride on a fiber span. Links may traverse multiple fiber spans, and thus be in multiple SRLGs. U.S. Patent Application, Serial Number ~~XX/YYYYYY~~ 09/714,970 entitled "System and Method for Auto Discovery of Risk Groups in an Optical Network" filed November 20, 2000, is incorporated herein by reference.

Please replace the Abstract with the following replacement Abstract:

A method for lightpath restoration in a reconfigurable optical network comprises the steps of naming each network addressable element in said reconfigurable optical network, determining current topology in said reconfigurable optical network, determining current resources in said reconfigurable optical network, requesting establishment of a lightpath, requesting reservation of restoration capacity, allocating the lightpath, and reserving the restoration capacity. Also disclosed is a method for lightpath restoration that comprises the steps of reserving restoration capacity, detecting transmission failures in the reconfigurable optical network, handling exceptions as a result of transmission failures, and allocating transmission capacity. ~~In addition, a corresponding system is presented to accomplish lightpath restoration~~

~~in a reconfigurable optical network that comprises means for each of naming each network addressable element in said reconfigurable optical network, determining current topology in said reconfigurable optical network, determining current resources in said reconfigurable optical network, requesting establishment of a lightpath, requesting reservation of restoration capacity, allocating the lightpath, and reserving the restoration capacity. A system for lightpath restoration in a reconfigurable optical network also is disclosed that comprises means for each of reserving restoration capacity, detecting transmission failures in the reconfigurable optical network, handling exceptions as a result of transmission failures, and allocating restoration capacity.~~